

Appn. No. 10/825,512
Docket No. 14XT128812/GEM-0155

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (previously presented) A device for mounting a rotating member comprising:
 - a mounting structure;
 - a bore formed in the mounting structure;
 - a ring housed in the bore; and
 - a shaft, one end of the shaft inserted in the ring;wherein the ring comprises a diabolo shape, the diabolo shape comprising a set of inclined beams, the beams connected to a first crown of the ring and connected to a second crown of the ring.
2. (previously presented) The device according to claim 1 wherein the diabolo is formed by a hyperboloid structure.
3. (previously presented) The device according to claim 2 wherein in response to insertion of the shaft into the ring, the hyperboloid shape has an inner diameter that is wider than an initial diameter of the hyperboloid shape before the insertion of the shaft, the difference in curvature forming an elastic fit over the shaft.
4. (original) The device according to claim 2 comprising twenty beams.
5. (original) The device according to claim 3 comprising twenty beams.

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6. (original) The device according to claim 2 wherein the inclination of the beams is about 50° relative to a plane perpendicular to the axis of the shaft.

7. (original) The device according to claim 3 wherein the inclination of the beams is about 50° relative to a plane perpendicular to the axis of the shaft.

8. (original) The device according to claim 4 wherein the inclination of the beams is about 50° relative to a plane perpendicular to the axis of the shaft.

9. (original) The device according to claim 6 wherein the inclination of the beams is $50^\circ \pm 10^\circ$.

10. (original) The device according to claim 6 wherein the inclination of the beams is $50^\circ \pm 5^\circ$.

11. (original) The device according to claim 1 wherein the diabolo shape has a twist angle less than or greater than 50° .

12. (original) The device according to claim 2 wherein the diabolo shape has a twist angle less than or greater than 50° .

13. (original) The device according to claim 3 wherein the diabolo shape has a twist angle less than or greater than 50° .

14. (original) The device according to claim 4 wherein the diabolo shape has a twist angle less than or greater than 50° .

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15. (previously presented) The device according to claim 2 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

16. (previously presented) The device according to claim 3 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

17. (previously presented) The device according to claim 4 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

18. (previously presented) The device according to claim 6 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

19. (previously presented) The device according to claim 9 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

20. (previously presented) The device according to claim 10 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

21. (previously presented) The device according to claim 12 wherein the hyperboloid structure is open along an aperture from the first crown to the second crown, the apertures in the first and second crowns being diametrically opposite each other.

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22. (original) The device according to claim 2 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

23. (original) The device according to claim 3 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

24. (original) The device according to claim 4 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

25. (original) The device according to claim 6 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

26. (original) The device according to claim 9 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

27. (original) The device according to claim 10 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

28. (previously presented) The device according to claim 12 wherein the hyperboloid structure is open along an aperture, the aperture being made in two diametrically opposed parts of the first and second crowns.

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29. (original) The device according to claim 2 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

30. (original) The device according to claim 3 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

31. (original) The device according to claim 4 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

32. (original) The device according to claim 6 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

33. (original) The device according to claim 9 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

34. (original) The device according to claim 10 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

35. (original) The device according to claim 11 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

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36. (original) The device according to claim 15 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

37. (original) The device according to claim 22 wherein the first and second crowns comprise a circular, cylindrical part with a generatrix line parallel to the axis of the shaft.

38. (previously presented) The device according to claim 1 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

39. (previously presented) The device according to claim 2 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

40. (previously presented) The device according to claim 3 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

41. (previously presented) The device according to claim 4 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

42. (previously presented) The device according to claim 6 wherein a second

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end of the shaft is disposed a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

43. (previously presented) The device according to claim 9 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

44. (previously presented) The device according to claim 10 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

45. (previously presented) The device according to claim 11 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

46. (previously presented) The device according to claim 15 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

47. (previously presented) The device according to claim 22 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the mounting structure.

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48. (previously presented) The device according to claim 29 wherein a second end of the shaft is disposed in a fixed structure, the fixed structure being more massive or having lower sensitivity to vibratory forces generating an acoustic source than the [[first]] mounting structure.

49. (previously presented) The device according to claim 1 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

50. (previously presented) The device according to claim 2 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

51. (previously presented) The device according to claim 3 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

52. (previously presented) The device according to claim 4 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

53. (previously presented) The device according to claim 6 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

54. (previously presented) The device according to claim 9 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

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55. (previously presented) The device according to claim 10 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

56. (previously presented) The device according to claim 11 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

57. (previously presented) The device according to claim 15 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

58. (previously presented) The device according to claim 22 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

59. (previously presented) The device according to claim 29 wherein a second end of the shaft is disposed in a fixed structure, the second end being supported by a second ring having a diabolo shape generated by a revolution about an axis of the shaft.

60. (previously presented) The device according to claim 1 wherein the rotating member is an anode of an X-ray tube, the shaft being configured to receive the anode.

61-95. (canceled)

96. (currently amended) The device according to claim 1, wherein:
the ~~ring comprises a~~ diabolo shape of the ring is configured as though formed by a revolution about an axis of the shaft; and

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the rotating member is configured to rotate about an axis aligned with the shaft.